

WHAT IS CLAIMED IS:

1. A power transmission device comprising:

a driving side supporting member;

a first transmission wheel supported by said driving side supporting member;

a driven side supporting member supported by said driving side supporting member in a manner enabling said driven side supporting member to be moved in a direction orthogonal to the rotational axis of said first transmission wheel;

a second transmission wheel supported by said driven side supporting member;

a power transmission member having an endless loop configuration which is wound around said first transmission wheel and said second transmission wheel to enable power transmission between said first and second transmission wheels; and

a cam-type adjusting mechanism interposed between said driving side supporting member and said driven side supporting member and configured to adjust a distance between axes of said first transmission wheel and said second transmission wheel;

said cam-type adjusting mechanism comprises a supporting shaft secured to one of said driving side supporting member and said driven side supporting member and disposed parallel to the rotational axes of said first transmission wheel and said second transmission wheel; and a cam rotatably secured via a manipulating boss member to said supporting shaft;

wherein said driven side supporting member is moveable relative to said driving side supporting member by means of said cam in accordance with an angle of rotation of said manipulating boss member, thereby enabling alteration of a distance between the axes of said first transmission wheel and said second transmission wheel.

2. The power transmission device according to claim 1, wherein said cam-type adjusting member comprises a plane cam externally fitted on said manipulating boss member, enabling said plane cam to be rotated integral with said manipulating boss member.

3. The power transmission device according to claim 1, wherein said cam-type adjusting mechanism includes a biasing member for urging said driven side supporting member in a direction away from said first transmission wheel.

4. The power transmission device according to claim 3, wherein said cam-type adjusting mechanism comprises:

- a supporting shaft secured to said driven side supporting member;
- a manipulating boss member rotatably supported by said supporting shaft;
- a plane cam fixed to said manipulating boss member in a manner to enable said plane cam to be rotated integral with said manipulating boss member;
- a follower member configured to be moveable in a direction orthogonal to said rotational axis by means of said plane cam; and

wherein said biasing member comprises a compression coil spring interposed between said follower member and said driving side supporting member in a compressed state, for urging said follower member toward said cam.

5. The power transmission device according to claim 1, wherein said cam-type adjusting mechanism further comprises a marker for determining whether the distance between the axes is appropriate.

6. A portable power working machine comprising:

a power transmission device employed for transmitting motive power between a prime mover and a working member;

said power transmission device comprising:

a driving side supporting member;

a first transmission wheel supported by said driving side supporting member;

a driven side supporting member supported by said driving side supporting member in a manner enabling said driven side supporting member to be moved in a direction orthogonal to the rotational axis of said first transmission wheel;

a second transmission wheel supported by said driven side supporting member;

a power transmission member having an endless loop configuration which is wound around said first transmission wheel and said second transmission wheel to enable power transmission between said first and second transmission wheels; and

a cam-type adjusting mechanism interposed between said driving side supporting member and said driven side supporting member and configured to adjust a distance between axes of said first transmission wheel and said second transmission wheel;

said cam-type adjusting mechanism comprises a supporting shaft secured to one of said driving side supporting member and said driven side supporting member and disposed parallel to the rotational axes of said first transmission wheel and said second transmission wheel; and a cam rotatably secured via a manipulating boss member to said supporting shaft;

wherein said driven side supporting member is moveable relative to said driving side supporting member by means of said cam in accordance with an angle of rotation of said manipulating boss member, thereby enabling alteration of a distance between the axes of said first transmission wheel and said second transmission wheel.

7. The portable power working machine according to claim 6, wherein said cam-type adjusting member comprises a plane cam externally fitted on said manipulating boss member, enabling said plane cam to be rotated integral with said manipulating boss member.

8. The portable power working machine according to claim 6, wherein said cam-type adjusting mechanism includes a biasing member for urging said driven side supporting member in a direction away from said first transmission wheel.

9. The portable power working machine according to claim 8, wherein said cam-type adjusting mechanism comprises:

- a supporting shaft secured to said driven side supporting member;
- a manipulating boss member rotatably supported by said supporting shaft;
- a plane cam fixed to said manipulating boss member in a manner to enable said plane cam to be rotated integral with said manipulating boss member;

a follower member configured to be moveable in a direction orthogonal to said rotational axis by means of said plane cam; and

wherein said biasing member comprises a compression coil spring interposed between said follower member and said driving side supporting member in a compressed state, for urging said follower member toward said cam.

10. The portable power working machine according to claim 6, wherein said cam-type adjusting mechanism further comprises a marker for determining whether the distance between the axes is appropriate.